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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 5

Complete if Known

Application Number	
Filing Date	
First Named Inventor	
Group Art Unit	1616
Examiner Name	BAWA, R.

02/08/02

Attorney Docket Number

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (If known)		
		6,264,945		Fischetti et al.	07-24-2001
		6,254,866		Fischetti et al.	07-03-2001
		6,248,324		Fischetti et al.	06-19-2001
		6,238,661		Fischetti et al.	05-29-2001
		6,056,955		Fischetti et al.	05-02-2000
		6,056,954		Fischetti et al.	05-02-2000
		6,017,528		Fischetti et al.	01-25-2000
		5,997,862		Fischetti et al.	12-07-1999
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		5,688,501		Merril et al.	11-18-1997
		4,957,686		Norris	09-18-1990
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		5,882,631		Suga et al.	03-16-1999
		5,741,487		Asai et al.	04-21-1998
		6,113,887		Mori et al.	09-05-2000
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FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office ³	Number ⁴		
		WO 97 02351 A		CIBA GEIGY AG, et al.	01-23-1997
		WO 96 07329 A		UNIV. MARYLAND	03-14-1996
		EP 0 510 907 A		AGRICULTURAL & FOOD RES	10-28-1992
		WO 99 04809 A		AMBI INC	02-04-1999

Examiner Signature	<i>Elie Phast</i>	Date Considered	9-4-03
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	
				Filing Date	
				First Named Inventor	
				Group Art Unit	1619
				Examiner Name	BAWA
				Attorney Docket Number	
Sheet	2	of	5		

Examiner Signature		Date Considered	9-4-03
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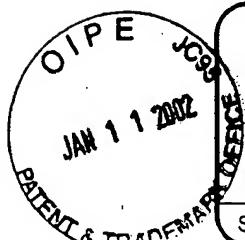
¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Sheet

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Application Number	
Filing Date	
First Named Inventor	
Group Art Unit	1619
Examiner Name	BAWA
Attorney Docket Number	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
BP		Reisenger, et al. (1998) "Characterization of Escherichia coli lysis using a family of chimeric E-L Genes" <i>Fems Microbiol Letter</i> . 164(1) p.159-167	
		Sheehan MM, et al. (1997) "The lytic enzyme of the Pneumococcal Phage Dp-1: a chimeric lysis of intergeneric origin." <i>Mol. Microbiol</i> . 25(4) p. 717-725	
		Young et al. (2000) "Phages will out: stragegies of host cell lysis." <i>Trends in Microbiology</i> . 8(4) p. 120-127	
		Garcia et al.(1997) "The Pneumococcal cell wall degrading enzymes: A modular design to create new lysins?" <i>Microb. Drug Resist.</i> 3(2): p. 199-211	
		Sheehan MM, et al., (1997) "The Lytic Enzyme of the Pneumococcal Phage Dp-I: a Chimeric Lysin of Intergeneric Origin" <i>Mol. Microbiol</i> . 25(4) p. 717-25	
		Garcia P, et al. (1997) "Bacteriophages of Streptococcus pneumoniae: a molecular approach" <i>Microb. Drug Resist.</i> 3(20) 165-76.	
		Sheehan, MM, et al.(1996) "Analysis of the catalytic domain of the lysin of the lactococcal bacteriophage Tuc2009 by chimeric gene assembling." <i>FEMS Microbiol.Lett.</i> 14(1): p. 23-28.	
		Sanz, JM, et al. (1996) "Construction of a multifunctional pneumococcal murein hydrolase by module assembly." <i>Eur. J. Biochem.</i> 235(3):601-5	
✓		Lopez R, et al. (1995) "Architecture and Domain Interchange of the Pneumococcal Cell Wall Lytic Enzymes" <i>Dev. Biol. Stand.</i> 85 p. 273-81.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

4 of 5

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Application Number

Filing Date

First Named Inventor

Group Art Unit

Examiner Name

Attorney Docket Number

1619

BAWA

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
SP		Croux, et al.(1993) "Interchange of Functional Domains Switches Enzymes Specificity: Construction of a chimeric pneumococcal-clostridial cell wall lytic enzyme." <i>Mol. Microbiology</i> . 9(5) p. 1019-25.	
		Diaz, E. et al. (1990) "Chimeric phage-bacterial enzymes: a clue to the modular evolution of genes. <i>PNAS</i> . 87(20) p. 8125-9.	
		Diaz, E. et al.(1990) "Chimeric pneumococcal cell wall lytic enzymes reveal important physiological and evolutionary traits." <i>J. Biol. Chem.</i> 266(9) p. 5464-71.	
		Lopez, et al. (1997) "The pneumococcal cell wall degrading enzymes: A modular design to create new lysins?" <i>Microbiological Drug Resistance</i> . 3(2) p. 199-211.	
		Loessner, et al. (1999) "Evidence for a holin-like protein gene fully embedded out of frame in the endolysin gene of <i>Staphylococcus aureus</i> Bacteriophage." (1999) <i>Journal of Bacteriology</i> . 181(15) p. 4452-4460.	
		Witte, A et al. (1998) "Characterization of <i>Escherichia coli</i> lysis using a family of chimeric E-L genes." <i>FEMS Microbiol. Lett.</i> , 164(1), p. 159-167	
		Martin, Ana C et al (1998): "Functional analysis of the two-gene lysis system of the pneumococcal phage Cp-1 in homologous and heterologous host cells." <i>Journal of Microbiology</i> 180(2), p. 210-217	
✓		Oki Masaya et al. (1997) "Functional and structural features of the holin HOL protein of the <i>Lactobacillus plantarum</i> phage phi-gle: Analysis in <i>Escherichia coli</i> system." <i>Gene (AMSTERDAM)</i> 197(1-2) p 137-145.	

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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SP		Young, Ry et al. (2000) "Phages will out: strategies of host cell lysis." <i>Trends in Microbiology</i> , 8(3) p 120-127.	
		Nelson, et al. (2001) "Prevention and elimination of upper respiratory colonization of mice by Group A Streptococci by using a bacteriophage lytic enzyme." <i>PNAS</i> . 98 (7) p. 4107-4112	
		Garcia, et al. (1987) "Purification and biochemical characterization of the pneumococcal bacteriophage Cp-1 lysin." <i>Journal of Virology</i> 61(8) p. 2573 - 2580.	
		Loessner, et al. (1996) "Modified Listeria bacteriophage lysin genes (ply) allow efficient overexpression and one-step purification of biochemically active fusion proteins." <i>Applied and Environmental Microbiology</i> . 62(8) p. 3057-3060	
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